

BARRIERS TO ENVIRONMENTAL CHANGE

Discovery Phase Part 1

Investigate and document the barriers to farmers' uptake of existing initiatives and tools designed to support decision-making to meet new environmental regulations.



CONTENTS

Executive Summary	3
Barriers to Change	4
On Farm Barriers to Change	5
Knowledge and Capacity	5
Financial Barriers	6
Mindset and Social Licence	7
Beyond the Farm Boundary	9
Industry Leadership	9
Incentives for Change	9
Regulation	9
Banking and Markets	10
Barriers to Change for Māori Farmers	11
Barriers to the Uptake of Existing Tools and Initiatives	13
Conclusion	15
Next Steps	17
Appendix	18
A – Workshop Report	18
B – Interview Personas	28

EXECUTIVE SUMMARY

Farming in New Zealand is changing. The environmental impacts of farming are presenting more interlinked challenges. The pressure is on farmers to shift from the methods adopted in the second half of the 20th century, towards an integrated system supporting healthy people, healthy land, and healthy return on investment. The government has released several policies, such as the National Policy Statements and National Environmental Standards under the Resource Management Act and the Climate Change Response (Zero Carbon) Amendment Act, these outline the environmental objectives and targets and there are several more policies in draft form and expected to become operative in 2021. Together these create significant expectations of food and fibre producers and for many, meeting them is likely to require some on farm changes. In order to enact change we must first understand the barriers.

Farmlands embarked on a project, stage 1 of which was designed and run by Dorenda Britten Ltd, to investigate the barriers to enacting environmental change. The project was based on Design Thinking methodologies. The project has received funding support from the Our Land and Water National Science Challenge, and additional high level input from AgResearch and Manaaki Whenua Landcare Research. Background to the project and the methodology are addressed in the workshop report, Appendix A. This report presents the methodology used, findings of the interviews and online forum discussions.

A range of barriers emerged from interviews with farmers and industry representatives; barriers to the uptake of existing tools and initiatives, as well as barriers to change more broadly. The barriers identified were both on the farm and beyond the farm boundary, and some were specific to the adoption of existing tools and initiatives. On farm barriers include knowledge gaps around regulations and lack of expertise, financial barriers such as high debt, and fear as a barrier to change. Off farm barriers include poor industry leadership, difficulties in translating government policies into actions, and the culture and practices within the banking industry. Farmer responses suggest, over and over again, that the main barrier to change is psychological. The author believes that the development of a psychological block originates in the way owner-operators traditionally structure their businesses. Overall, this stems from having too many things that need immediate attention, distracting the farmer from any strategic thinking. On the whole, farmers know that they should be thinking strategically, but the more change that confronts them the more likely they are to dwell on the everyday. Although not explicitly stated, this barrier to uptake of existing tools and initiatives was uncovered through a human-centred approach.

BARRIERS TO CHANGE

The barriers to change, identified, occur both on the farm and beyond the farm boundary. Some barriers were specific to the uptake of existing tools and initiatives, Figure 4. Within these broad themes the data has been arranged into several sub-themes describing different types of barriers to change. As there may be unique challenges for change on Māori farms and within agribusinesses, this has been included as a separate section.

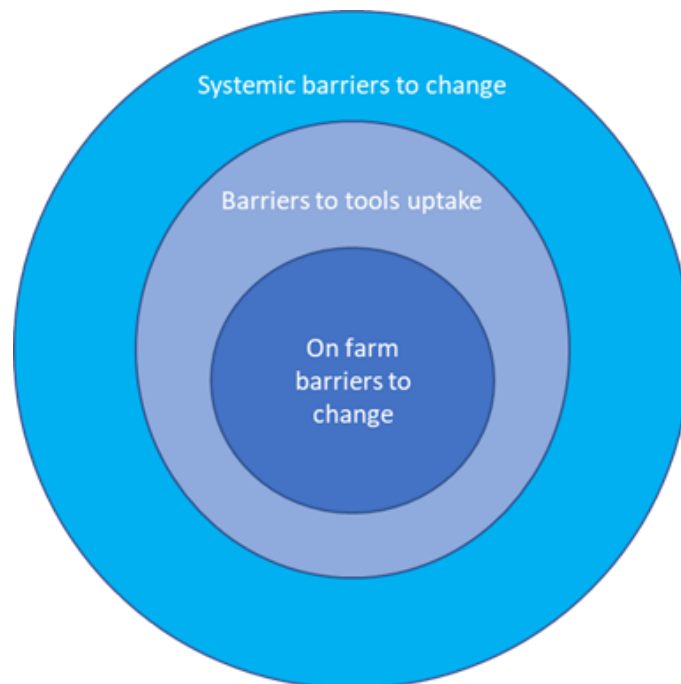


Figure 4 – Barriers to Change

ON FARM BARRIERS TO CHANGE

THEME: KNOWLEDGE AND CAPACITY

Lack of knowledge about new regulations

Farmers interviewed regard policy changes as cyclical. This is reflected in the fact that many of the farmers have not seriously engaged with any of the government's policy or strategic documents and are learning about the policies reinterpreted through personal farming networks. This can lead to inaccuracies and misinterpretation about what is in the documents. There was also a perceived lack of evidence as to why the changes are needed. Farmers were quick to highlight throughout the interviews that there is a lack of simple modelling for change.

Lack of farm specific information

Farmers need more information on the risks and benefits of new systems before changing. There are many leading farming groups, each concentrating on raising the bar on their own properties. We identified a growing number of innovative solutions; however, the status quo prevails when people are under pressure, especially so within single farm operations. Farmers need to have the risks and benefits of new ideas quantified for them before they will feel safe to venture. They also needed individual farm modelling to understand the implication of changes on their individual farms

Lack of capacity and expertise

Some of the farmers interviewed felt they were time poor and that the pressures of daily life are such, they have little headspace to process the changes, the implications of them, and to think about possible changes. Farmers are frequently working day and night but feel lonely and ill-equipped to make so many multifaceted and interconnected decisions, making burnout a real issue.

Some farmers felt they lacked some important expertise to know how to make change e.g. financial and environmental aspects. Some wished to outsource expertise but expressed concern about advisers. Interviewees identified a need for support from professional services, one that balances engagement without burnout – helping farmers regain their enjoyment for what was often a vocation of choice. Agri-businesses need to work alongside farmers and gain their trust, not be only trying to 'sell them stuff.' On a number of occasions, we uncovered a desire for a different kind of support that didn't teach farmers how to farm, but instead offered a sounding board. The support needs to speak the same language as the farmer whilst encouraging future-thinking.

Other interviewees thought a lack of new knowledge and willingness to learn plagues many 'traditional' farmers and that those farmers who are battling day-to-day to run their farms would benefit by gaining new knowledge. New knowledge could be gained by travelling to other markets, however they are unable to do this because they have not previously invested in upskilling their team members on the farm.

Farmers not recognised as good employers

Traditionally farmers are concerned about succession, but a current barrier to change is the lack of interest from new generations to enter the industry, leading to increased reliance on migrant workers. In addition, interviewees suggested that farmers are not currently recognised as good employers. As people are the most important component; the industry must invest in its people before it can begin looking at changing its practices.

THEME: FINANCIAL BARRIERS

Debt as a barrier to change

For many farmers money itself isn't a big motivator, it is the shortage of it that keeps them awake at night. The interviews revealed that debt is a daunting truth for many farmers. This is supported by statistics, in that debt, totaling \$62.8 billion NZD and represents a 270 percent growth from the early 2000's^[1]. High debt rates impacting Loan to Value Ratios, paired with many financial institutions now requiring capital repayments, leave little or no budget to adopt change. It has become clear through the interview process that when the stakes are high, there is greater risk aversion. Interviews also found that high debt often leads to farmers being locked into production-focused systems, as understood by financial institutions.

High costs and insufficient support as a barrier to change

Some interviewees anticipated that the cost of meeting new rules and regulations would be high, itself a barrier to making changes. They also expressed concern that the changes will have an ongoing impact on profitability. This is likely to be a particular barrier for those with high debts to service.

Some interviewees suggested that both financial and technical support was needed to support change.

[1] O'Connor, New Scheme for Financially Distressed Farmers. Online. June 17 2019.

THEME: MINDSET AND SOCIAL LICENCE

Production mindset as a barrier to change

As Fit for a Better World[2] states “we are not a volume producer – and we should stop acting like one”. Interviews, specifically with industry experts, have supported this statement. However, those interviewed on the farm have proven reluctant to make any shift as there is no room for change financially and incentives to do so, are too small.

Other interviewees suggested that production statistics, such as yield, were important for farmers as they were outward signs of success. In this way, the New Zealand mindset is more influenced by European and North American models rather than learning from an indigenous New Zealand model.

Diminished social licence as a barrier to change

Society’s perception of farming impacts those working on the land and their ability to enact change. Many interviewees reported feeling that there were negative perceptions of farming and negative narratives surrounding farming; like farming is always the problem. Some admitted the disgrace they feel about working in the industry and are often reluctant to introduce themselves as such. It was felt by some, that urban New Zealand's view of farming is predominantly shaped by the media, the best and the worst. At one end of the scale is Country Calendar – a show that displays the best-of-the-best in the industry, while the general media tends to focus on the other end of the scale, reporting on those who are ‘fouling our roads’ and ‘clogging our waterways’. Some also felt that there was a lack of recognition for any good stuff that is done.

Many interviewees felt that the focus is always on farmers to change, when to achieve our environmental goals, change needs to happen through the value chain and in our urban areas. The tensions between urban and rural populations were noted by many as a particular barrier to change. Interviewees wanted an acknowledgement by urban communities that they also contribute to environmental problems. Although previous studies may suggest that a large percentage of farmers are supported by urban dwellers, interviewees felt that it is those that don’t support the industry that are more likely to voice their opinions and be heard. Farmers talked about feeling alone in an ever-changing business environment which also threatens the way of life for them and their families.

[2] Primary Sector Council, Fit For A Better World Aotearoa New Zealand. Online. June 11 2020.

Trepidation of working in a bi-cultural setting

During the interview process, while many seemed hopeful and welcoming of a bi-cultural change, the greatest barrier is fear. Fear of failure. Fear of ridicule by peers. Fear of the unfamiliar. Overall, farmers and their networks recognise the bi-cultural standards that are expected of them, but sometimes lack the ability to show respect for diverse perspectives on the issues at hand. The role of the New Zealand agricultural education curriculum was recognised as important here.

BEYOND THE FARM BOUNDARY

THEME: INDUSTRY LEADERSHIP

Poor leadership as a barrier to change

Some interviewees felt that there was a lack of industry leadership specifically when focusing on bettering practices to improve the environment. There was also a lack of trust in industry-good bodies.

THEME: INCENTIVES FOR CHANGE

Insufficient financial incentives

Some interviewees thought that any financial incentives for change are too small to be worthwhile and that there is insufficient appetite in the market for environmental products.

No connection with producers and consumers

The interviews recognised that many in the industry are ready to collaborate, however the current lack of communication between consumers and smaller farms means that there is little direct feedback about what consumers want going back to farmers and diminishes any motivation to engage better practices. Other interviewees felt that consumers have little idea about complexities of the farm system, and they want customers to have a realistic awareness about the environmental challenges that the industry is facing.

No imperative for change

Some of those interviewed believe they are already doing an amazing job and that they don't need new rules.

THEME: REGULATION

Lack of resonance with the overarching policy framework

Regulation is perceived, by farmers, to come from 'shiny suits' in government offices who do not understand the complexity of day-to-day life of farming. Some of those interviewed see a lack of an overarching purpose guiding the regulations which created a sense of no common goals. A number of comments from the interviews suggested that what was lacking was a collective goal, designed by farmers and industry experts to drive innovation, trust and support. Some interviewees noted that the constantly shifting goalposts, with regulations updating and new regulations coming in, created uncertainty for them because of the time-lag to implementation. This uncertainty reduced the appetite for change.

Poor consideration of on farm implementation

Some farmers interviewed perceived that regulations do not take into account financial bottom-lines or complexity of implementation. They felt despondent and frustrated by the lack of understanding of complexities surrounding the implementation of change. Interviewees were quick to say that the burden often stems from finances and believe that industry regulators demonstrate little consideration for bottom-line realities.

Many of those interviewed suggested the system needs a redesign. Something that was once so simple is now over-complicated. Any redesign must recognise that one size does not fit all and that each farm, in the diverse New Zealand landscape, faces specific environmental challenges. Key tools proposed, such as nutrient budgets and farm plans, were seen by some as a tick box exercise and not useful.

Whatever the case, these new rules are interpreted as making it hard for farming to be enjoyable. What was once a vocation that was appreciated by society is now viewed as diminished and just 'too hard'.

Some interviewees noted that there was insufficient grass roots support and that failure to support the process at this level makes change less attractive.

Perverse consequences

Some considered there to be perverse or unintended consequences from some of the government policy directions, such as the social consequences of the large-scale conversion to pine trees.

THEME: BANKING AND MARKETS

Negative impact of culture within banking

Environmental change cannot be solely driven by farmers and their immediate networks. The culture and practices within the banking sector were noted by some interviewees as being a significant barrier to change. Banks were perceived to mainly consider the short term whereas farmers look at the long term. Banks were perceived to not value alternative land uses, and their risk averse culture locks farmers into the status quo and a pathway of production rather than value.

The example of the ASB bank's Rural Environmental Compliance Loan^[3] was signaled as a step in the right direction.

[3] A loan to help farmers manage their environmental compliance costs and get their sustainability projects started. Online. N.D.

Markets and changing preferences

Some interviewees noted that the food and fibre economy is heavily weighted towards export markets. Others noted that already the cost of food does not reflect the true cost of production. A potential barrier is if markets do not perceive an alignment between New Zealand's values and the products being produced, they might not be prepared to bear the increased costs of production to meet environmental regulations.

One of the greatest challenges raised in the interviews has identified as changing lifestyles and changing preferences. These changing food preferences are moving away from New Zealand's traditional business and a great number of consumers are opting for less meat or looking for substitute proteins, either for perceived health reasons or in an attempt to mitigate environmental impacts from growing populations[4].

THEME: BARRIERS TO CHANGE FOR MĀORI FARMERS

Insufficient embedding of Te Ao Māori in policy frameworks and policy development

In interviews with Māori farming experts, cultural issues are at the fore. Documents, such as Taiao Ora, Tangata Ora and Fit for a Better World Aotearoa New Zealand, recognise the value of Te Ao Māori. However, these reports do little to breakdown the complexity of bringing two world views together.

Interviewees suggested that as New Zealand embraces changes in attitude toward the land, this presents an opportunity to truly integrate Māori cultural values. However, they considered current political frameworks as dismissive towards Māori, in that they fail to engage and facilitate dialogue with the Māori community early enough.

Complex farm ownership structures

In the authors' opinion, and as a result of a number of conversations with Māori farm managers, a major barrier to the uptake of change by Māori owned farming operations are the ownership structures. Many Māori land entities are owned under a shareholder' system, requiring collective agreement on the adoption of any changes. The author interprets this as pointing to a need for understanding and support of multi-stakeholder processes. Discussion amongst multiple ownership levels takes time.

[4] Primary Sector Council, Fit For A Better World Aotearoa New Zealand. Online. June 11 2020.

Insensitive and opportunistic branding

New Zealand is recognised, by the interviewees, as a quick adopter of its multi-cultural status when branding itself on the world stage. However, some felt that these branding exercises often come across as insensitive and opportunistic. The farming industry itself is guilty of this too, often leveraging cultural identity whilst failing to incorporate Māori views into day-to-day practice. There is a lot to be learnt from cultural farming methods, many of which could benefit New Zealand farming as it works toward enacting environmental change. In the authors opinion, getting the balance right with land-based initiatives will not only enhance New Zealand's overall reputation globally, but help effect social cohesion.

BARRIERS TO THE UPTAKE OF EXISTING TOOLS AND INITIATIVES

Although no data was collected specifically on the barriers to uptake of existing tools and initiatives, some barriers may be inferred or suggested from the more general barriers to pro-environmental change. Although this is not a comprehensive look at barriers to the use of existing tools and initiatives, they may provide some insight.

Not finding out about tools and initiative

The general barriers suggest that there was an overall lack of knowledge of the policies and rules. Consequently there may also be a lack of knowledge of the tools and initiatives that exist. Given the lack of trust in advisers, industry-good bodies and the reliance on informal networks for information, farmers may not know about the existing tools and initiatives. The general barriers also suggested that many farmers are time poor and, in some cases, overwhelmed. This lack of headspace and time, to explore, learn and engage with new tools and initiatives, are likely to be a barrier to their uptake.

Not finding the right tool or initiative

The general barriers suggest that many farmers found there was a lack of farm-specific information and the lack of consideration of their bottom-line realities. This might suggest that a barrier to uptake of existing tools and initiatives is that they aren't farm specific enough and translated to make things meaningful for individual farmers. Also, that unless the tools and initiatives respond to those in high debt situations and consider the complexities of change and impact on economics, they may be considered less relevant. In a similar vein, tools and initiatives that don't help connect farmers to customers or to value-add opportunities, or aren't cognizant of changing markets and preferences, may also be considered less relevant.

No incentive

The general barriers suggest that many farmers have not seriously engaged with the government policy and strategic documents and that they don't think there is a compelling and collective goal. Also some farmers considered that their practices are already good enough and there is no need for additional regulations. This may mean that existing tools and initiatives to help comply with these new expectations may not seem relevant or there is a lack of a sense of urgency about them.

Lack of agency

The diminishing social licence, sense of being held solely responsible for the environmental issues, and a sense of isolation identified in the general barriers could also be a barrier to the uptake of existing tools and initiatives through reducing farmers sense of agency and empowerment. This feeling may be exacerbated by the uncertainty created by the rapidly changing regulatory expectations. It may also be heightened by a sense that many of the levers for change lie beyond the farm boundary and beyond their control. An example of this includes banks and markets, where they don't recognise certain paths forward. For example, banks may not recognise potential benefits of alternative land uses, this in itself may represent impediment to using existing tools and initiatives in those areas.

CONCLUSION

It is clear that enacting change in the farming industry is not going to be easy, though not impossible. As it stands, the land is paying the price and it will continue to, until change takes effect. Change will be the result of collaboration, unity and leadership amongst the farming community and all other stakeholders. There are significant social, cultural and economic challenges that must be addressed as a part of implementing change on the land. For many farmers the pressure of daily farming doesn't leave much mental space, or time, for absorbing and processing the effects the legislation will have on their business. The writer believes there is significant value in working through these challenges before asking stakeholders in the supply and consumption chain, for buy in.

Meeting the needs of a changed world is not just about farming but about how New Zealand presents on the world stage. This is about creating an authentic brand which aligns with how food and fibre is actually made. It is about walking the walk. As it stands, there are ideas but no cohesive processes for testing those ideas. Farmers are exhausted by all the shifting goals and regulations coming from different regulatory bodies. There are many questions left unanswered and this has created frustration amongst farmers and their communities. Success will be dependent on individual farmers and their ability to listen, learn and apply new ideas. This investigation seeks to set the scene for positive change. In summary, the author believes that many of the barriers to enacting on-farm change requires psychological, not just physical, support.

The table below, Table 1, summarises the barriers to change, concluded from the interviews conducted as a part of the Discovery Phase.

Barrier	Provocation
Debt or costs to change are holding farmers back from enacting environmental change on the land.	How do we bring the financial discussion to the fore?
Little alignment between financial structures and the requirement to make significant changes.	Is it possible to bring everyone around the same table, in the interests of New Zealand?
In order to satisfy changing consumer preferences, farming must change from a volume-based to a value-based industry.	Who will help farmers to bridge that gap?

Farmers feel isolated and blamed for the results of land-use practices and feel that urban communities need to join with them in improving outcomes.	What is the mechanism for this mutual understanding?
With no market feedback loop, farmers cannot envisage what they need to change.	Who can facilitate the gathering of this feedback and present it to the relevant farming sectors?
Industry support currently promotes sales to farmers.	How can a supporting organisation mitigate burnout and help farmers face the future positively?
The barrier is being open to up-to-date expertise and new ideas that will create value into the future.	Farmers need help testing new ideas as appropriate.
Lack of bridge between policy and action.	There is a psychological barrier to uptake of any new initiatives. Where are the soft skills to bring this together?
Farmers are disinterested in regulation. For radical change to occur farmers must understand what is being asked of them in clear language.	Who will translate policy language into actionable steps?
The status quo is the safest bet for the majority of smaller farmer operators.	How will we equip these operators to see that the status quo does not offer a secure future?
Barrier to environmental change is the lack of awareness and empathy, from all stakeholders.	How do we frame the changes so that all New Zealanders can participate?
Cultural barriers stem from regulatory bodies, who are failing to engage with Māori communities in the early stages of initiating change.	If we want cultural integration, the process must be redesigned.
Cultural challenges in New Zealand stem from fear. Many are afraid to begin enacting change with the fear of being or doing wrong.	Cultural change must be normalised.

As the Discovery Phase of the project has been completed there is now sufficient information to move to the solution hypothesis and the development and implementation stage. As stated, the scene has been set and the 'lay of the land' is clear. It is now time to begin finding the best pathways to enact change.

THE NEXT STEPS

The next step of the How to Enact Environmental Change project is the solution hypothesis. It would be advised to use a lean canvas methodology to define the most effective themes for developing a solution hypothesis.

APPENDIX

APPENDIX A – WORKSHOP REPORT

INTRODUCTION

Originally, it was anticipated that the data for this research would come from a face-to-face workshop. Due to COVID-19 restrictions, the process had to be restructured to account for social distancing. Ongoing restrictions forced the cancellation of the workshop altogether and the redesign of the programme.

The alternative plan was to conduct interviews, in person where possible, and by phone where there were travel barriers. The following is a summary of the findings from the interviews conducted. These points have been taken, verbatim, from a series of interviews with farmers and industry professionals.

METHOD

Thirty people were drawn from connections from team members of the How to Enact Environmental Change project. The group of people were divided into farmers, agri-industry professionals and included an urban end-user voice. 69.5% of interviewees are from urban settings, whilst the remaining 30.5% are farmers on the land. The interviews focused on sharing diverse views on new policies to combat environmental degradation.

Further to the interviews, a website was developed to support the conversation and a forum to encourage ongoing dialogue.

The farmer interviews were conducted in person, across Canterbury, by John Arrell (Farmlands) and Andy Lowe (Dorenda Britten Ltd). Due to geographical restrictions, the industry professionals and end-user feedback interviews were conducted over the phone by Dorenda Britten. All interviews were conducted as structured conversations, leaving room for connection and trust. The approach taken is based on Design Thinking methodologies and involves open questions. “How do you feel about this ...” triggers an emotional reaction that is more beneficial in drawing information. This method was applied to draw out the most effective results.

BACKGROUND & CONTEXT

As government increasingly moves to implement more stringent land-based regulations, it is critical to consider how, why and if, farmers will positively embrace change. The National Policy Statements and National Environmental Standards under the Resource Management Act and the Climate Change Response (Zero Carbon) Amendment Act are regulatory attempts to drive New Zealand towards a more environmentally friendly future, and food and fibre producers are faced with the responsibility to “put true sustainability at the centre of everything they do in [the] sector”[5].

Although land-managers have a significant role in realising the future through sustainable practices, the increasing expectations of environmental performance are a challenge to many. The response from the farming industry will not be homogenous, the responses will range from seeing opportunities, innovating new solutions and a rapid uptake of new ideas through to those unable or unwilling to change and adapt. This range of responses is similar to the standard product adoption curve[6], Figure 2. Although, at this is stage there is no ‘product’ to adopt, the adoption curve relates to how people view new ideas as well as new ‘things’. 20% of the market will be quick to adopt new ideas or processes, whilst there is another 20% at the other end of the curve which are referred to as ‘laggards’ (in business language). This group are disinterested and reluctant to change. The majority in the middle, 60%, are aware and interested, yet may be slow to act. The author suggests that for environmental change to occur, it must be adopted by all land-based industries.



Figure 2 - Product Adoption Curve

[5] Primary Sector Council, Fit For A Better World Aotearoa New Zealand. June 11 2020.

[6] Chris Singlemann, What is the Product Adoption Cure? Online. September 15 2020.

HOW TO ENACT ENVIRONMENTAL CHANGE PROJECT

The How to Enact Environmental Change project has been developed with the aim of understanding barriers to change, both barriers to uptake of existing tools and initiatives and barriers to pro-environment changes more broadly. In order to achieve this Dorenda Britten Ltd, a Christchurch-based consulting company, has been contracted to facilitate the discovery and engagement piece, and prepare reporting.

Dorenda Britten Ltd has considerable experience with the use of Design Thinking tools. In particular, applying these and bespoke methods, to solving some of New Zealand's major challenges. This is not intended to be a scientific report. The report has been compiled from the results from interviews and online forum comments, and any comments or opinions of the authors have been identified.

THE DISCOVERY PHASE

The Discovery Phase is crucial to this project, as laid out in Figure 3, and has been designed to uncover the barriers to a collaborative, grounded and exciting future for farming in New Zealand. A group of thirty people were invited to be a part of the conversation. Personas of participants can be found in Appendix B. Participants come from a variety of backgrounds, professionally and culturally, and offered perspectives on the current state of New Zealand farming and the mindset of people on the land and the entities that support them. The interviews, because of the nature of who we could reach during the Covid-19 pandemic, were conducted with a representation from the agri-food sector and one wool producer. The overarching views are on Agri, food and fibre. Responses from participants have been analysed to help understand the 'lay of the land', and ultimately explain the barriers to change.

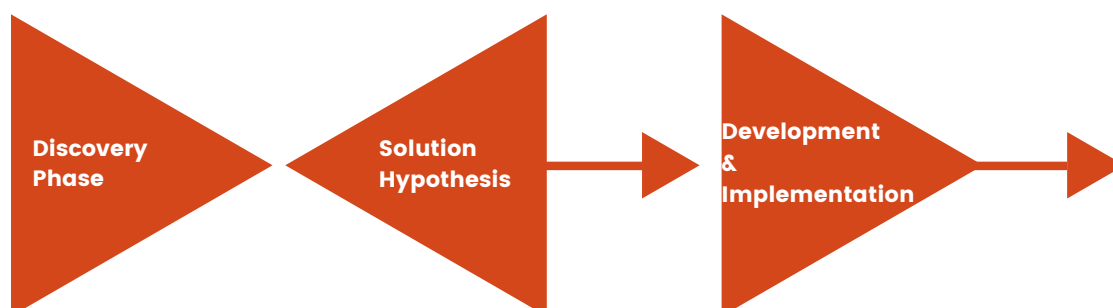


Figure 3 – How to Enact Environmental Change Project Timeline



Figure 4 - Discovery Phase Timeline

LAY OF THE LAND

The Otira Viaduct over Arthurs Pass has been used to help describe the situation farming faces. There was a problem getting from the East to the West Coast of New Zealand prior to the '90's. There were many existing challenges; weather, natural environments, different types and ages of vehicles, all of which had to be considered before hypothesising any solutions. Added to that, the constant geological movement of the area and the likelihood of further major geological activity. Therefore, the land needed to be analysed and understood before different options could be evaluated. Eventually a viaduct was selected, making a metaphorical link between the past and the future i.e. East and West Coasts.

Much like the Otira Viaduct, the How to Enact Environmental Change project has been established to overcome environmental challenges faced by farmers and the wider farming community. It is a human habit to rush to conclusions. However, one of the important components of any human challenge is the need to first explore why change is, in some cases a threat and yet in a number of cases, an opportunity. Thus the Discovery Phase has focused on collecting necessary information to present the 'lay of the land' and understand the barriers the farming industry has to address.

The analysis of the current state has identified economic, cultural and social barriers standing in the way of environmental change for many farmers. They are calling for a common goal that can drive real change, across and between all sectors. It is important to keep in mind that this study is limited by the fact that those involved are only a small proportion of the farming community in New Zealand. Those involved were, across a range of types of farming and although they were encouraged to comment on their sector specifically and their peers within it, their views are not taken as representative.

FARMER INTERVIEWS

Economic

- Buried in debt. No room for change or risk
- Financial success is about capital value
- Only want basic drawings. Why do anything different?
- Major lack of financial literacy
- Banks play a short game, but farming is a long game
- Banks don't correctly value alternative land use. Don't know how (causes clash - Farmers see success as Capital Value.)
- Won't take a risk on anything new or different (alternative land uses)
- Pushing debt on Farmers, locking them in to status quo
- Farm value measured on its production volume, meaning the only Farmer incentive is to increase production volume
- Financial incentives for value-add are too small for most to bother with
- The Processor Co-op model is broken. Co-ops incentive is to dump commodities on the market
- Failure to be good employers has left the industry starved of talented staff necessary for change
- The ever-rising Land Values have allowed poor operators to continue, thus preventing evolution
- This is no different to the end of subsidies. When the Govt was subsidising bad operators. Today, the environment is subsidising bad operators
- No one has actually modelled what the changes will mean on individual farms
- Money isn't a big motivator. But a shortage of it is a huge demotivator
- The enviro rules will reduce their drawings. Demotivates them
- The financial incentives to do better (antibiotic free etc) are too small compared with the incentive to just produce more volume

Environmental

- Believe they are doing an amazing job already – new rules pointless
- Do not understand the rules, no idea what the actual effect on them is
- Cannot monetise Native bush, unfair. makes them indignant
- One size does not fit all. Blanket rules are madness to many
- Moving goal posts. Just wait until the absolute last minute
- Nutrient budgets and farm plans are nonsense, just a speeding ticket
- Products that do environmental good get destroyed by the incumbents

Social

- No Vision, No leadership. What is the big vision we're all driving towards together?
- Lack of personal responsibility = blame
- Livelihood – this is messing with my way of life. “My income needs status quo”
- Denial. We are not the sole problem, Urban is too
- Ignorance. Why should NZ do anything when we are only 0.003% of the global problem!
- Comfort in negativity, negativity attracts all the energy
- Lack of training and personal development
- No feedback from the end consumer means no one has said – actually, you're not amazing
- Very time poor, frequently side-tracked by the urgent
- All the incumbent players need to perpetuate the status quo, preventing change
- ZERO trust in the industry bodies. Some even feel betrayed by them
- Accepting that change is going to happen. But resisting it as long as possible
- Farmers are food production experts
- This environmental stuff is beyond their expertise. Need it outsourced
- Farmers want to feel part of the tribe. But the tribe lacks positive leadership, so the negative has taken over a small compared with the incentive to just produce more volume

Cultural

- Appreciative of Māori world view and feel it aligns already
- Production volume focus is embedded in the culture. Quantity, not quality. Dislike anything that will reduce production
- Change = Scary. Status Quo = Safe
- Lack of urgency. Known this was coming for a long time, did nothing. Now it is here, they want more time... (Human nature)
- Want all this enviro stuff done for them. Just make it go away (same mindset as accounting)
- If I do not have the problem, I do not care about it
- Farmers are producers, not marketers, accountants, scientists etc. Like any other industry, they need to outsource this stuff. Yet they must do it all themselves

INDUSTRY PROFESSIONAL INTERVIEWS

Economic

- The cost to change practices is high – financially and mentally
- Little support from banks or policy makers
- Financial and technical support needs to be more readily available
- Farmers, like all people, have different risk tolerances
- The bottom line is at the core of everything
- Farming is their livelihood – a lot have high amounts of debt, therefore are not willing to take risks
- Banks are beginning to recognise their privilege and power they hold
- CRI's are getting more support than individuals – often those with new ideas
- Substitute proteins are beginning to have an impact on the F+F sector
- What is the \$44bn goal worth on the plate? Is this goal value or volume based?
- Backend of COVID could bring people into the sector
- Need to provide food at a realistic cost for farmers to benefit
- A gap forming between farmers and the entities who are feeding from them
- True sustainability is built off business sustainability
- Our economy is weighted heavily towards exports at all costs

Environmental

- Sustainable farming practices are achievable, but the question surrounds the 'how?'
- Rules are intense and exhaustive, making it hard for the work to be enjoyable.
- Goals are useful and necessary in giving people a focus/drive, but the current state needs a redesign
- Needs to be awareness of the rules by all stakeholders – not just the farmer
- Some support systems (e.g. banks) are celebrating environmental success now
- The cycle comes around every 10 years or so, for change to be realised it is going to take genuine collaboration, unity and leadership over time
- Exemplars would be useful to help guide
- 'From the soil up' – farming philosophies need to be based around the health of the land
- The fundamentals of farming have not changed, the system has been made complicated
- The land is paying the price

Social

- Sense of urgency around education, however a lot do not wish to learn anymore once leaving formal education
- Opportunities more understood by those who were not born into the industry but want to farm
- Farming can be very ego-driven, want to have highest rates of production as outward signs of success
- 'Broadband is the new red band' – innovation ,and connectivity are critical
- Policy disregards interwoven life decisions
- Collective isolation attributed to the uncertainty
- Feeding off each other
- Difficulty employing internally, reliant on migrant workers
- Collaboration will be key
- Community – establishing a community that is supported through advisory, needs to not tell farmers how to farm – speaking the same language
- Opportunity to shift mindsets
- Need to include farmers in decision making from the outset
- Farmers need to change the perception of the industry and make it more attractive for potential employees
- Farmer succession is a preoccupation
- Need to declutter and refocus on what success might look like
- Can't buy trust
- Both rural and urban sectors are facing their own challenges – farmers need to see both sides
- Need to balance engagement with policy without burning farmers out
- Need for social investment, people are the most important aspect
- Need to embrace the farming communities that exist
- Tone down the rhetoric
- The first step is to create an environment for farmers to thrive in
- Need to leverage premiums that consumers have indicated they are willing to pay

Cultural

- Need for collaboration
- Need to grow the land and the people
- A lot are limiting themselves by their cultural beliefs
- Need to reinvest in Māori strategy, starting off by listening to stories
- Do not want to apply greenwashing to the Māori culture - a fine line
- Learn from Māori farmers and their approach to farming and vice versa
- You cannot pick and choose when to meet Māori cultural standards
- A rush to get indigenous branding into the market, often not done in a genuine way
- There is an advantage to leverage the culture on the global stage – needs to be done respectfully and collaboratively
- Changes in the agri-curriculum is promising for the future of farming – next generation coming into the industry
- Being brave and taking the leap to begin a cultural journey.
- Look after the land and it will look after you
- Political frameworks aren't engaging with Māori early enough for the reports to be endorsed by Māori
- New Zealand is too caught up in American/European models
- It is the farmers job to be a Kaitiaki of the land – guardian
- Farmers are trying to adopt cultural ideas – the best place to start
- There is a need to be open to change

APPENDIX B – INTERVIEW PERSONAS

- Food entrepreneur
- Agri multi-media
- Government-owned farm manager
- Dairy farmer
- Dairy share milker
- Sheep and beef farmer
- High country farmer (wool producer)
- Arable farmer
- Family horticulture business
- Māori trust board member
- Iwi sustainability manager
- National agricultural advisor
- Environmental economist and journalist
- Meat industry
- sustainability manager
- Milk co-operative sustainability manager
- Food marketer/researcher
- Iwi farm manager
- Dairy industry
- sustainability strategist
- Beef and lamb Industry manager
- Canterbury cultural land management advisor
- Gen Y urban, white coffee drinker
- Innovative mixed farmer
- Regional sustainable agricultural advisor



Enact Change

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